

**SIGMA-ALDRICH**

sigma-aldrich.com

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Version 4.0 Revision Date 13.03.2010

Print Date 08.09.2010

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

Product name : Bis(trifluoromethane)sulfonimide lithium salt

Product Number : 544094

Brand : Aldrich

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +18003255832

Fax : +18003255052

Emergency Phone # : (314) 776-6555

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

According to Regulation (EC) No1272/2008

Acute toxicity (Category 3)

Acute toxicity (Category 3)

Skin corrosion (Category 1B)

Chronic aquatic toxicity (Category 3)

According to European Directive 67/548/EEC as amended.

Causes burns. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxic in contact with skin and if swallowed.

**Label elements**

Pictogram



Signal word

Danger

Hazard statement(s)

H314

Causes severe skin burns and eye damage.

H301

Toxic if swallowed.

H311

Toxic in contact with skin.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER or doctor/physician.

Hazard symbol(s)

T

Toxic

R-phrases(s)

R24/25

Toxic in contact with skin and if swallowed.

R34

Causes burns.

R52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the

	aquatic environment.
S-phrases(s)	
S22	Do not breathe dust.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61	Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Other hazards - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms	: Bis(trifluoromethylsulfonyl)aminelithium salt Lithium bistrifluoromethanesulfonimide
Formula	: C <sub>2</sub> F <sub>6</sub> LiNO <sub>4</sub> S <sub>2</sub>
Molecular Weight	: 287,09 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration
<b>Bis(trifluoromethane)sulfonimide lithium salt</b>				
90076-65-6	415-300-0	616-124-00-9	Acute Tox. 3; Skin Corr. 1B; Aquatic Chronic 3; H314, H301, H311, H412 T, R24/25 - R34 - R48/22 - R52/53	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

---

**7. HANDLING AND STORAGE****Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Conditions for safe storage**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas. Moisture sensitive.

---

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Personal protective equipment****Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

**Eye protection**

Face shield and safety glasses

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	powder
Colour	white

**Safety data**

pH	7,0 - 9,5 at 10 g/l
Melting point	234 - 238 °C - lit.
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available

Water solubility            ca. 10 g/l at 20 °C

---

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

Avoid moisture.

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen fluoride, Lithium oxides

---

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### Reproductive toxicity

no data available

### Specific target organ toxicity - single exposure

no data available

### Specific target organ toxicity - repeated exposure

no data available

### Aspiration hazard

no data available

### Potential health effects

#### Inhalation

May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

#### Ingestion

Toxic if swallowed. Causes burns.

#### Skin

Toxic if absorbed through skin. Causes skin burns.

#### Eyes

Causes eye burns.

### Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

### Additional Information

RTECS: no data available

---

## 12. ECOLOGICAL INFORMATION

**Toxicity**

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 202 mg/l - 96,0 h  
Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia magna (Water flea) - 20 mg/l - 48 h

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

---

**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

---

**14. TRANSPORT INFORMATION****ADR/RID**

UN-Number: 2923 Class: 8 (6.1) Packing group: II  
Proper shipping name: CORROSIVE SOLID, TOXIC, N.O.S. (Bis(trifluoromethane)sulfonimide lithium salt)

**IMDG**

UN-Number: 2923 Class: 8 (6.1) Packing group: II EMS-No: F-A, S-B  
Proper shipping name: CORROSIVE SOLID, TOXIC, N.O.S. (Bis(trifluoromethane)sulfonimide lithium salt)  
Marine pollutant: No

**IATA**

UN-Number: 2923 Class: 8 (6.1) Packing group: II  
Proper shipping name: Corrosive solid, toxic, n.o.s. (Bis(trifluoromethane)sulfonimide lithium salt)

---

**15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

---

**16. OTHER INFORMATION****Text of H-code(s) and R-phrase(s) mentioned in Section 3**

Acute Tox.	Acute toxicity
Aquatic Chronic	Chronic aquatic toxicity
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.
Skin Corr.	Skin corrosion
T	Toxic
R24/25	Toxic in contact with skin and if swallowed
R34	Causes burns.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Further information**

Copyright 2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

---